

A landslide wipes out many individuals of a large colony of termites.	Unpredictable changes in allele frequencies due to random chance events.
This mechanism causes mostly random allele frequency changes, but fluctuations could occur for a purpose.	Primary source of genetic variation, happens in asexual & sexual populations.
Certain traits about Individuals afford them higher probability of being selected to mate with by the opposite sex.	This mechanism randomly changes allele frequencies at the molecular level.
Small populations affected significantly.	The amino acid valine is substituted for by the amino acid proline, causing blood cells to form a crescent shape instead of a usual doughnut shape.
Can lead to mixing of different populations' gene pools.	A change in DNA, RNA or amino acid sequence.
A white pine seed drifts from a mainland continent to a nearby island, causing white pines to now grow among the usual red pine.	Male spiders are often consumed by the females after mating, so males with less fear instincts pass on offspring more often.
Individuals with traits best suited to their environments will survive and produce the next generation.	A green insect is well camouflaged in a grassy meadow while a red insect is not.
Requires variation in a population in order to take place.	This mechanism changes allele frequencies due to selection of certain members of one sex being preferred by the opposite sex.
Movement of individuals into or out of a population.	Requires some stimulus for one gender to perceive as desirable.
This mechanism randomly changes allele frequencies at the organism level.	This mechanism changes allele frequencies due to survival of the fittest and death of unfit individuals in their environment.

Natural Selection	Genetic Drift
Preferential Mating	Mutations
Gene Flow	